

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Advanced Methods to Target and Eliminate)	CG Docket No. 17-59
Unlawful Robocalls)	
)	

**COMMENTS OF
NCTA – THE INTERNET & TELEVISION ASSOCIATION**

NCTA – The Internet & Television Association (“NCTA”) submits these comments in response to the *Sixth FNPRM* in the above-referenced proceeding.¹ NCTA supports the Commission’s ongoing efforts to address illegal and fraudulent robocalls while balancing the interests of legitimate callers. While NCTA appreciates the Commission’s interest in standardizing the use of SIP Codes for immediate notification of call blocking, SIP Codes 607 and 608 present risks and unresolved questions that warrant delaying any mandate that relies solely on those codes, so that these issues may be resolved through the standards-setting process. Indeed, there is no compelling reason to shortcut the standards process, as SIP Code 603 currently provides sufficient information for legitimate callers to seek redress should they suspect their calls are being blocked erroneously. NCTA encourages the Commission to instead reevaluate reliance on SIP Codes 607 and 608 after the June 30, 2023 STIR/SHAKEN implementation deadline for small facilities-based providers. This reevaluation is particularly sensible given the significant amount of traffic that still transits TDM networks.

¹ See *Advanced Methods to Target and Eliminate Unlawful Robocalls; Petition for Reconsideration and Request for Clarification of USTelecom - The Broadband Association*, Order on Reconsideration, Sixth Further Notice of Proposed Rulemaking, and Waiver Order, CG Docket No. 17-59, FCC 21-126 (rel. Dec. 14, 2021) (“*Sixth FNPRM*”).

I. SIGNIFICANT UNRESOLVED ISSUES REMAIN IN CONNECTION WITH SIP CODES 607 AND 608

As the Commission acknowledges, standards work on SIP Codes 607 and 608 is ongoing—work that is especially important because SIP Codes 607 and 608 currently present risks and unresolved questions. The Commission should ensure that these risks and questions are sufficiently resolved before adopting a mandate to use only SIP Codes 607 and 608.

For instance, as of the end of 2021, ATIS’s IP-NNI Task Force had an open work stream attempting to address nearly a dozen open questions regarding the implementation of SIP Codes 607 and 608.² This work stream references Requests for Comment (“RFCs”) from the Internet Engineering Task Force that themselves examine certain protocols and procedures for SIP Codes 607 and 608 that are still under discussion.³ While the IP-NNI Task Force is working through these questions, it has only just begun to identify the numerous considerations that must be addressed prior to mandatory implementation of SIP Codes 607 and 608.

Critically, many of the standards gaps that remain could affect the security of the voice network. For example, the standards process is considering whether 607/608 responses could be misused to exacerbate attacks on voice networks with effects akin to distributed denial of service (“DDoS”) attacks. Today, when a call is rejected and the terminating providers transmits a 607 or 608 response code, the originating provider often tries many alternative routes to deliver the call. Within the IP-NNI Task Force, there is concern that these attempts to reroute the rejected

² See ATIS, IPNNI-2021-00122R000, *Analysis of Support of RFC 8197 (Unwanted) and RFC 8688 (Rejected) in VoIP Networks – Questions and Clarifications* (Dec. 6, 2021), available at https://access.atis.org/apps/group_public/document.php?document_id=62915.

³ See Internet Engineering Task Force, *A SIP Code for Unwanted Calls* (July 2017), <https://tools.ietf.org/html/rfc8197>; Internet Engineering Task Force, *A Session Initiation Protocol (SIP) Response Code for Rejected Calls* (Dec. 2019), <https://tools.ietf.org/html/rfc8688>; see also ATIS, IPNNI-2021-00027R003, *Analysis of Support of RFC 8197 (Unwanted) and RFC 8688 (Rejected) in VoIP Networks* (May 12, 2021), available at https://access.atis.org/apps/group_public/document.php?document_id=59410&wg_abbrev=ipnni.

call could unintentionally “aggravate a mass call event with a calling number that is being rejected with a 607 or 608.”⁴ The IP-NNI Task Force is considering ways of preventing alternative routing in response to SIP Codes 607 and 608, which would help address this concern. It is essential that this initiative and similar standards-setting work be resolved before any mandate to use only SIP Codes 607 and 608 is adopted, in order to prevent harm to networks.

II. SIP CODE 603 CURRENTLY PROVIDES LEGITIMATE CALLERS WITH SUFFICIENT INFORMATION

The *Sixth FNPRM* asks whether SIP Code 603—which is widely deployed on providers’ networks and is not subject to substantial ongoing standards work—provides adequate information to callers.⁵ The answer is yes.

SIP Code 603 is sufficient for high-volume callers, who are the most likely to benefit from immediate notification, to determine whether there is an analytics-based blocking issue they may need to address. As USTelecom has explained, callers need only run a simple analysis of SIP Code 603 responses to their high-volume calling campaigns.⁶ Callers can then work with their provider to determine by whom the call was blocked.⁷ It is appropriate that high-volume callers and/or the service providers that support them bear these minimal responsibilities as part of their calling campaigns while essential standards work on SIP Codes 607 and 608 is

⁴ See ATIS, IPNNI-2021-00087R000, *Alternating routing on 607/608* (Sept. 13, 2021), available at https://access.atis.org/apps/group_public/document.php?document_id=60902.

⁵ *Sixth FNPRM* ¶ 44.

⁶ See Letter from Joshua M. Bercu, Vice President, Policy & Advocacy, USTelecom, to Marlene Dortch, Secretary, FCC, CG Docket No. 17-59, at 1 (filed Sept. 17, 2021) (“With SIP Code 603, a caller will be able to identify analytics-based blocking based on rudimentary analysis and therefore will be in a position to seek redress.”).

⁷ A provider’s blocking redress point of contact information is readily available on its website.

completed.⁸ Indeed, high-volume callers would likely need to undertake such analyses even if SIP Codes 607 and 608 were the only codes permitted to be returned by a terminating voice provider with an IP network in the event of call blocking. This is because the codes may not transmit back to the calling party in many instances. In particular, if a blocked call transits a TDM network or interconnection point, which still occurs for a significant percentage of voice traffic, a 607 or 608 response code would be mapped to ISUP Code 21 (and if the call later passes onto another IP network, remapped to SIP Code 603).⁹

In those instances in which SIP Codes 607 and 608 would transmit back to the calling party, it may be that these SIP Codes would give legitimate callers marginally more information. However, SIP Codes 607 and 608 also pose a risk of giving bad actors increased visibility into robocall mitigation efforts and enabling them to circumvent such measures more effectively.¹⁰ Importantly, however, the ability of bad actors to evade analytics-based blocking will diminish as more providers implement the STIR/SHAKEN call authentication protocol.

Given the above and the outstanding risks and questions regarding implementation of SIP Codes 607 and 608, the Commission should decline to mandate the use of only SIP Codes 607 and 608 at this time. Rather, NCTA asks the Commission to allow the standards-setting process

⁸ See also Letter from Joshua M. Bercu, Vice President, Policy & Advocacy, USTelecom, to Marlene Dortch, Secretary, FCC, CG Docket No. 17-59, at 2 (filed Nov. 8, 2021) (“[C]ompelling callers to undertake pro-consumer practices, including running analytics to ensure that their calls are wanted and acting carefully and deliberately in response to such blocking, directly serves the public interest.”). Legitimate high-volume callers can also work proactively with terminating voice providers to ensure that their calls are not inadvertently blocked in the first instance.

⁹ To help ensure that SIP Codes are received by the appropriate parties, the Commission should make clear that IP voice transit providers are required to advance 600 codes—including SIP Codes 607 and 608—when they are transmitted.

¹⁰ While it is true that, as the Commission has observed, “[b]ad actors can already rapidly adjust their calling patterns . . . as soon as connection rates drop, regardless of immediate notification,” universal use of SIP Codes 607 and 608 for analytics-based blocking would give bad actors additional data to inform whether and how to adjust their calling patterns and could make those adjustments more effective. *Advanced Methods to Target and Eliminate Unlawful Robocalls*, Fourth Report and Order, 35 FCC Rcd. 15221, ¶ 54 (2020).

to continue to iron out unresolved issues—including proposed measures to prevent bad actors from misusing SIP Codes 607 and 608 to perpetrate attacks on voice networks—and reassess SIP Codes 607 and 608 after June 30, 2023, by which time STIR/SHAKEN will be mandated on all IP networks.

CONCLUSION

NCTA appreciates the Commission’s willingness to reexamine the use of specific SIP Codes when blocking robocalls. However, there remain significant unresolved issues surrounding SIP Codes 607 and 608 that counsel against a rush to prevent the use of SIP Code 603 as an alternative. The Commission should instead continue to allow industry to resolve these issues through the standards-setting process and consider reevaluating use of only SIP Codes 607 and 608 after June 30, 2023.

Respectfully submitted,

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